



**UNITED STATES PATENT AND TRADEMARK OFFICE**

60

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/113,712	07/10/1998	EDWARD F. HELINSKI	EN997043	8352

23416            7590            04/23/2002

CONNOLLY BOVE LODGE & HUTZ, LLP  
1220 N MARKET STREET  
P O BOX 2207  
WILMINGTON, DE 19899

EXAMINER

DEXTER, CLARK F

ART UNIT

PAPER NUMBER

3724

DATE MAILED: 04/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. <b>09/113,712</b>	Applicant(s) <b>Helinski</b>	
	Examiner <b>Clark F. Dexter</b>	Art Unit <b>3724</b>	
<i>-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --</i>			
<b>Period for Reply</b>			
<p>A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.</p> <ul style="list-style-type: none"> <li>- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.</li> <li>- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.</li> <li>- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.</li> <li>- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).</li> <li>- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>			
<b>Status</b>			
1) <input checked="" type="checkbox"/> Responsive to communication(s) filed on <u>Jan 17, 2002</u>			
2a) <input type="checkbox"/> This action is FINAL.      2b) <input checked="" type="checkbox"/> This action is non-final.			
3) <input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.			
<b>Disposition of Claims</b>			
4) <input checked="" type="checkbox"/> Claim(s) <u>1-24</u> is/are pending in the application.			
4a) Of the above, claim(s) <u>12-20, 23, and 24</u> is/are withdrawn from consideration.			
5) <input type="checkbox"/> Claim(s) _____ is/are allowed.			
6) <input checked="" type="checkbox"/> Claim(s) <u>1-11, 21, and 22</u> is/are rejected.			
7) <input type="checkbox"/> Claim(s) _____ is/are objected to.			
8) <input type="checkbox"/> Claims _____ are subject to restriction and/or election requirement.			
<b>Application Papers</b>			
9) <input type="checkbox"/> The specification is objected to by the Examiner.			
10) <input type="checkbox"/> The drawing(s) filed on _____ is/are objected to by the Examiner.			
11) <input type="checkbox"/> The proposed drawing correction filed on _____ is: a) <input type="checkbox"/> approved b) <input type="checkbox"/> disapproved.			
12) <input type="checkbox"/> The oath or declaration is objected to by the Examiner.			
<b>Priority under 35 U.S.C. § 119</b>			
13) <input type="checkbox"/> Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).			
a) <input type="checkbox"/> All b) <input type="checkbox"/> Some* c) <input type="checkbox"/> None of: 1. <input type="checkbox"/> Certified copies of the priority documents have been received. 2. <input type="checkbox"/> Certified copies of the priority documents have been received in Application No. _____. 3. <input type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).			
*See the attached detailed Office action for a list of the certified copies not received.			
14) <input type="checkbox"/> Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).			
<b>Attachment(s)</b>			
15) <input type="checkbox"/> Notice of References Cited (PTO-892)		18) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____	
16) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)		19) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)	
17) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____		20) <input type="checkbox"/> Other: _____	

Art Unit: 3724

## **DETAILED ACTION**

1. The Appeal Brief filed January 17, 2002 (paper no. 22) has been received. Upon careful consideration thereof, particularly applicant's arguments, a new grounds of rejection, specifically under 35 USC 112, 1st paragraph, is necessitated.

### ***Claim Rejections - 35 USC § 112***

2. Claims 1-11, 21 and 22 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

*(f)* The original disclosure does <sup>not</sup> <sub>^</sub>sufficiently disclose the connecting structure between the upper and lower dies and the upper and lower housings, particularly structure which allows the dies to be rotated within the housings while still enabling the dies to be held in place sufficiently to perform punching operations. Further, it appears that, to operate, the upper die must be moved out of the lower housing to allow for passage of the workpiece between the dies. However, applicant appears to contend that a free sliding of the die does not necessarily result (see arguments on page 9 of the Brief). Thus, if no sliding movement is possible, it is not clear how the punching apparatus is operable with one of the dies in both housings (e.g., as shown in Figure 2). If sliding as well as rotational movement is possible, it is not clear how the dies are

Art Unit: 3724

supported/held in the die housings to rotate and slide therein. While one having ordinary skill in the art may have assumed in reading applicant's disclosure that the fit between the dies and housings would be provided by a pressure/friction fit, for example a light pressure fit which allows for such rotational and sliding movement but still maintains the dies in a desired location/orientation for operational purposes, applicant appears to argue against such a die-holding configuration. Thus, the Examiner respectfully submits that it is not at all clear as to how the dies are sufficiently held in the housings to enable the disclosed alignment adjustments while also enabling operation on the punching apparatus.

***Claim Rejections - 35 USC § 102/103***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3724

5. Claims 1-3 and 6-8 are rejected under 35 U.S.C. 102(b) as anticipated by Kranik et al. or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kranik et al. in view of Shimizu et al.

Claim 1

Kranik et al. discloses a system with every structural limitation of the claimed invention including: a first die (e.g., the die which includes surface 28) including a first aperture; a second die (e.g., 48) including a second aperture; a first housing (e.g., 14) including a first die passage receiving at least a portion of the first die (as shown in Fig. 1, the first die passage receives the entire first die); and a second housing (e.g., 42) including a second die passage receiving at least a portion of at least one of the first die and the second die (as shown in Fig. 1, the second die passage receives the entire second die). Further, the second die passage is configured to permit at least one of the first die and the second die to rotate therein; that is, “configured to permit at least one of the first die and the second die to rotate therein” is interpreted as defining the second die passage as being round thus permitting rotation therein. Kranik et al. meets this limitation in that the second die passage thereof (which receives component 48) is also round.

In the alternative, if it is argued that there is no disclosure that the second die passage is round, the Examiner takes Official notice that round dies fitted into round die passages are old and well known in the art as evidenced by Shimizu et al. and provide well known benefits including ease of manufacture and assembly. Therefore, it would have been obvious to one

Art Unit: 3724

having ordinary skill in the art to make the second die passage as well as the second die of Kranik et al. round for the well known benefits including those described above.

Claim 2

Kranik et al. substantially meets the claim in that the second die passage is shown as being of such a width/diameter that either the first or second die can be received therein, and is long enough so that all of the second die and at least a portion of the first die can be received therein. But, Kranik et al. lacks the second die passage receiving at least a portion of the first die.

However, the first and second die passages are the same size and the first and second dies are the same size. Thus, the first die (e.g., in the extended position shown in Figure 1) can clearly be received in the second die passage if the second die is moved downwardly within the second die passage. That is, Kranik et al. discloses all of the claimed structure, but lacks the manipulation of the structure such that the second die passage receives a portion of the first die. However, such a manipulation of the disclosed components is considered an intended use of the system disclosed by Kranik et al.

In the alternative, if it is argued that Kranik et al. does not explicitly teach that the dies are the same size and that the die passages are the same size, the Examiner takes Official notice that such a configuration is old and well known in the art and provides well known benefits including interchangeability of parts (i.e., any die can be pulled out of storage and used in either the first or second die passage). Therefore, it would have been obvious to one having ordinary skill in the art

Art Unit: 3724

to make the die passages configured to receive either the first die or the second die by making the dies the same size and the die passages the same size for the well known benefits including that described above.

Claim 3

Kranik et al. discloses the first die passage and the second die passage which are configured to permit at least the first die to rotate therein. That is, “configured to permit at least the first die to rotate therein” is interpreted as defining the first and second die passages as being round thus permitting rotation therein. Kranik et al. meets this limitation in that the first and second die passages thereof are also round. Further, the first and second dies are shown as being the same size, and the first and second die passages are shown as being the same size, thus the second die passage is configured to permit rotation of the first die therein.

In the alternative, if it is argued that there is no disclosure that the first and second die passages are round, the Examiner takes Official notice that round dies fitted into round die passages are old and well known in the art as evidenced by Shimizu et al. and provide well known benefits including ease of manufacture and assembly. Therefore, it would have been obvious to one having ordinary skill in the art to make the first and second die passages along with the corresponding dies of Kranik et al. round for the well known benefits including those described above. Further in the alternative, if it is argued that Kranik et al. does not explicitly teach that the dies are the same size and that the die passages are the same size, the Examiner takes Official

Art Unit: 3724

notice that such a configuration is old and well known in the art and provides well known benefits including interchangeability of parts (i.e., any die can be pulled out of storage and used in either the first or second die passage). Therefore, it would have been obvious to one having ordinary skill in the art to make the dies the same size and the die passages the same size for the well known benefits including that described above.

#### Claim 6

Kranik et al. discloses a punch and die assembly with every structural limitation of the claimed invention including: a first die (e.g., the die which includes surface 28) including a first aperture; a second die (e.g., 48) including a second aperture; a first housing (e.g., 14) including a first die passage receiving at least a portion of the first die (as shown in Fig. 1, the first die passage receives the entire first die); and a second housing (e.g., 42) including a second die passage being configured to receive at least a portion of the second die and at least a portion of the first die (as shown in Fig. 1, the second die passage receives the entire second die, and further the second die passage is shown as being the same size as the first die passage and thus is configured to receive the first die). Further, the second die passage is configured to permit at least one of the first die and the second die to rotate therein; that is, “configured to permit at least one of the first die and the second die to rotate therein” is interpreted as defining the second die passage as being round thus permitting rotation therein. Kranik et al. meets this limitation in that the second die passage thereof (which receives component 48) is also round.

Art Unit: 3724

In the alternative, if it is argued that there is no disclosure that the second die passage is round, the Examiner takes Official notice that round dies fitted into round die passages are old and well known in the art as evidenced by Shimizu et al. and provide well known benefits including ease of manufacture and assembly. Therefore, it would have been obvious to one having ordinary skill in the art to make the second die passage as well as the second die of Kranik et al. round for the well known benefits including those described above.

Further in the alternative, if it is argued that Kranik et al. does not explicitly teach that the dies are the same size and that the die passages are the same size, the Examiner takes Official notice that such a configuration is old and well known in the art and provides well known benefits including interchangeability of parts (i.e., any die can be pulled out of storage and used in either the first or second die passage). Therefore, it would have been obvious to one having ordinary skill in the art to make the die passages configured to receive either the first die or the second die by making the dies the same size and the die passages the same size for the well known benefits including that described above.

Claim 7

Kranik et al. meets the claim in that the second die passage is shown as being of such a width/diameter that either the first or second die can be received therein, and is long enough so that all of the second die and at least a portion of the first die can be received therein. In the alternative, if it is argued that Kranik et al. does not explicitly teach that the dies are the same size

Art Unit: 3724

and that the die passages are the same size, the Examiner takes Official notice that such a configuration is old and well known in the art and provides well known benefits including interchangeability of parts (i.e., any die can be pulled out of storage and used in either the first or second die passage). Therefore, it would have been obvious to one having ordinary skill in the art to make the die passages configured to receive either the first die or the second die by making the dies the same size and the die passages the same size for the well known benefits including that described above.

Claim 8

The first die passage and the second die passage of Kranik et al. are round and thus are configured to permit at least the first die to rotate therein. Again, the first die is the same size as the second die and thus the second die passage is configured to receive the first die (as well as permit rotation thereof). And again, in the alternative, if it is argued that Kranik et al. does not explicitly teach that the dies are the same size and that the die passages are the same size, the Examiner takes Official notice that such a configuration is old and well known in the art and provides well known benefits including interchangeability of parts (i.e., any die can be pulled out of storage and used in either the first or second die passage). Therefore, it would have been obvious to one having ordinary skill in the art to make the die passages configured to receive either the first die or the second die by making the dies the same size and the die passages the same size for the well known benefits including that described above.

Art Unit: 3724

***Claim Rejections - 35 USC § 103***

6. Claims 4, 5, 9-11, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kranik et al. or in the alternative, over Kranik et al. in view of Shimizu et al.

Regarding claims 4, 5, 9 and 10, Kranik et al. lacks alignment marks on the respective dies and lacks a specific disclosure of the alignment accuracy of the die apertures. However, the Examiner takes Official notice that it is old and well known in the art, particularly the manufacturing art, to custom manufacture cooperating components and to provide alignment marks on the components to facilitate the desired alignment of the components. Therefore, it would have been obvious to one having ordinary skill in the art to provide alignment marks on the dies of Kranik et al., and to provide an accurate alignment of the die apertures for the well known benefits including that described above.

Regarding claim 11, Kranik et al. discloses a compression spring, but lacks the particular relationship between the spring, the punch and the housings. However, the Examiner takes Official notice that it is old and well known in the art to provide compression springs in any one of various known configurations to provide a biasing force to a punch. Therefore, it would have been obvious to one having ordinary skill in the art to provide the particular relationship between the spring, the punch and the housings as an alternative configuration for biasing the punch based on known considerations such as manufacturing considerations.

Regarding claims 21 and 22 as understood, the Examiner takes Official notice that it is old and well known in the art to provide punch and dies each in respective housings which are

Art Unit: 3724

movable relative to each other for various known reasons including to repair and/or replace one of the punch or dies without removing the other. Therefore, it would have been obvious to one having ordinary skill in the art to make the upper and lower housings movable relative to one another for the well known benefits including that described above.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clark Dexter whose telephone number is (703) 308-1404. The examiner's typical work schedule is Monday, Tuesday, Thursday and Friday, and he can be reached during normal business hours on these days.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Allan Shoap, can be reached at (703)308-1082.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)308-1148. The fax numbers for this group are: formal papers - (703)305-3579; informal/draft papers - (703)305-9835.



**Clark F. Dexter  
Primary Examiner  
Art Unit 3724**

cfd  
April 22, 2002